



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,298	12/01/2003	Georg Michelitsch	282734US8X	6105
22850	7590	11/27/2009		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER TERMANINI, SAMIR	
			ART UNIT	PAPER NUMBER
			2179	
			NOTIFICATION DATE	DELIVERY MODE
			11/27/2009	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
oblonpat@oblon.com  
jgardner@oblon.com

### Office Action Summary

**Application No.**

10/726,298

**Applicant(s)**

MICHELITSCH ET AL.

**Examiner**

Samir Termanini

**Art Unit**

2179

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 August 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 15-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/5508)
- Paper No(s)/Mail Date 8/6/2009
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Inventor's Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### **BACKGROUND**

1. This Final Office Action is responsive to communications filed on 7/2/09.
2. Claim(s) 15-28 are pending. Claims 15, and 19-20 are independent in form. Claims 15, 19, and 20 have been amended.

### **INFORMATION DISCLOSURE STATEMENT**

3. The information disclosure statement (IDS) filed on 8/6/2009 has been acknowledged and considered by the examiner. The Initial copy of form PTO-1449 is included in this office action.

### **RESPONSE TO AMENDMENT**

4. Arguments concerning the Examiner's Rejections of Claims 15-17, 19-22, and 25-27 made in the previous Office Action (Mail dated: 4/3/2009) have been fully considered but are not persuasive. Therefore, the rejection(s) have been maintained.

### **SPECIFICATION**

5. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: Claim 19 recites a "computer readable medium" however, the Specification only discloses "computer readable storage medium."

For the purpose of examination, the Examiner interprets the term "computer readable medium " to include only physical storage devices such as CD-ROM, magnetic disks, etc.

**CLAIM REJECTIONS-35 U.S.C. § 103**

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. **Claims 15-16, 19-22, and 25** are rejected under 35 U.S.C. 103(a) for being obvious over by *Lee* (U.S. Pre-Grant Pub. 2003/0234799 A1) in view of *Fedorovskaya* (US 2003/0156304 A1) and *Stern et al.* (US 2002/0047828 A1).

As to independent **claim 15**, *Lee* describes a method for operating a display device ("...display apparatus 10 ..., " para. [0040]), comprising: generating user position

Art Unit: 2179

information of a user in relation to a display of said display device ("...distance between the display apparatus 10 and a user...", para. [0030]), wherein said user position information is descriptive of a distance of the user with respect to said display ("...according to the distance between a user and the display...", para. [0029]); changing a display mode for displaying information on said display depending on said user position information ("...sensed by the distance sensor 11 and adjusts a size of an image on the basis of the read image displaying ratio data...", para. [0029]), wherein in said display mode an amount of said displayed information depends on said user position information ("...displaying ratio data storage part 3 according to the distance between a user and the display apparatus ..., " para. [0029]); and displaying said information on said display based on said display mode ("...displaying ratio data, and an image displaying ratio setting ..., " para. [0029]; See also see S9 of Fig. 2).

It should be noted, *Lee* differs from claim 15 in that:

- 1) *capturing an image of a user;*
- 2) *measuring an eye distance between a right eye and a left eye of the user in the image;*
- 3) *generating user position information of the user in relation to a display of said display device based on the eye distance; and*
- 4) *deriving a view angle of the user with respect to the display from said image of and the view angle is compensated for are not clearly shown.*

*Fedorovskaya* is cited for the teaching of capturing an image of a user ("...recording one or more of the following signals using physical or bio-metrical devices...", para. [0025]); measuring an eye distance between a right eye and a left eye of the user in the image ("...The distance between the person's eyes...", para. [0055]); generating user position information of the user in relation to a display of said display

Art Unit: 2179

device based on the eye distance ("...depends on the distance of the user to the video camera...," para. [0055]), wherein said user position information is descriptive of a distance of the user with respect to said display ("...The distance between the person's eyes is used to account for this dependency...," para. [0055]).

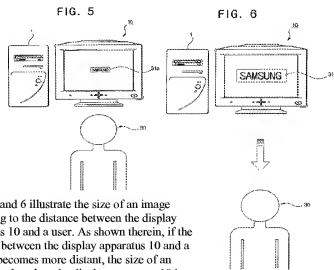
*Stern et al.* taught deriving a view angle of the user with respect to the display from said image of ("order to determine the correct viewing angle for the individual," para. [0043]) and the view angle is compensated for ("The image size or view size on the user's screen will also adjust automatically in accordance with the direction of monitor display movement. The mechanical apparatus also preferably will control the height of the monitor and the viewing angle of the monitor," para. [0044]).

It would have been obvious to one ordinary skill in the relevant field at the time the invention was made to use distance determination through the *eye distance measurement* taught in *Fedorovskaya*, with the *Lee* because: *Fedorovskaya* identifies that a variety of methods can be used to determine distance between a user and a video camera and that eye distance measurement is one method known in the art to be a suitable equivalents for that purpose. According to *Fedorovskaya*, eye distance measurement is taught to be a known alternative:

[t]he specified image divided by the distance between the person's eyes. The distance between the person's eyes is determined using the facial recognition algorithms mentioned above. The necessity of taking the ratio between the size of the mouth and some measure related to the head of the person (e.g. the distance between the eyes) stems from the fact that the size of the mouth extracted from the video frame depends on the distance of the user to the video camera, position of the head, etc. The distance between the person's eyes is used to account for this dependency, however, other measures such as the height or width of the face, the area of the face and others measures can also be used...

(para. [0055]). Furthermore, one skilled in the art, having common knowledge and common sense, would reasonably be expected to draw the inference from *Stern et al.* that displaying at least one display item could depend on user position information to determine "...the optimal viewing distance." (para. [0023]).

As to dependent **claims 16**, which depends from claim 15, *Lee* further discloses "...According to the first embodiment of the present invention, the video card 7 can be controlled by a video card control program such as a text size adjusting function of a control board provided in the operating system....," para. [0033]: If a user is in a first position (closer distance) with respect to the display the information includes an amount of text that is larger than what it would be if the user was in a second position (farther distance) with respect to the display. See Figures 5 and 6, reproduced below.



FIGS. 5 and 6 illustrate the size of an image according to the distance between the display apparatus 10 and a user. As shown therein, if the distance between the display apparatus 10 and a user 30 becomes more distant, the size of an image displayed on the display apparatus 10 is enlarged (refer to a change from 31a of FIG. 5 to 31b of FIG. 6), so that the image can be easily seen by a user. In contrast, if a user 30 moves closer to the display apparatus 10, the size of the image displayed on the display apparatus 10 is reduced. (*Id.*, para. [0038]).

As to independent **claim 19**, this claim differs from claim 15 only in that it is directed to a computer readable medium defined by the process of claim 15. *Lee* describe, ("...the present invention provides a method for adjusting an image size of a display apparatus, a system for the same, and a media for recording a computer program therefor, in which the size of an image is automatically adjusted according to a change of a distance between the display apparatus and a user....," para. [0043])(emphasis added) . Accordingly, this claim is rejected for the same reasons set forth in the treatment of claim 15, above.

As to independent **claim 20**, *Lee* further describes: a display device comprising: a display configured to display information ("...this configuration, an image such as a letter, a picture, etc. displayed on a display apparatus is automatically enlarged/reduced according to a change of a distance between the display apparatus and a user, so that the user can see the image easily regardless of the distance between the display apparatus and himself/herself....," para. [0042]). Therefore this claim is rejected under for the additional reasons set forth in the treatment of claim 15.

As to dependent **claims 21–22**, which depends from claim 20, *Lee* further describes: a display device comprising: a display configured to display information ("...displayed on a display apparatus....," para. [0042]). Therefore this claim is rejected under for the additional reasons set forth in the treatment of claims 16 and 17, respectively.

As to dependent **claim 25**, which depends from claim 24, *Lee* further shows picture elements (e.g. see Figs. 5 and 6 above).



9. **Claim 28** is rejected under 35 U.S.C. 103(a) for being obvious over *Lee* (U.S. Pre-Grant Pub. 2003/0234799 A1) in view of *Fedorovskaya* (US 2003/0156304 A1) as applied to claim 15 above and further in view of *Stern et al.* (US 2002/0047828 A1).

As to dependent **claim 28**, *Lee* taught the limitations addressed in the treatment of claim 15, above. Specifically, a method for operating a display device ("provided on a display apparatus", Abstract), comprising: generating user position information of a user in relation to a display of said display device ("distance between the LCD 1 and the upper half of the user's body is detected," col. 3, Lines 24-30), wherein said user position information is descriptive of a distance of the user with respect to said display ("whether the upper half of the user's body is near the LCD 1 or far from the LCD 1 is detected." col. 3, Lines 24-30), changing a display mode for displaying information on said display depending on said user position information ("display of a moving image is made according to the detected distance." col. 1, Lines 59-63), wherein in said display mode an amount of said displayed information depends on said user position information and displaying said information on said display based on said display mode ("The changeover between the enlargement and the reduction of an image and between the scrolling and the stopping of a text and between the moving display and the stationary display of a moving image is made according to the detected distance." col. 1, Lines 59-63).

However, *Lee* fails to clearly disclose a saturation of a color for displaying at least one of the display items depending on the user position information.

*Stern et al.* is cited for teaching a saturation of a color for displaying "...In accordance with yet another embodiment of the present invention, a user may be presented with color tests ..., " para. [0013]) at least one of the display items depending on the user position information ("...Additionally, system 10 preferably measures a user's "amplitude of accommodation," which is generally defined as the minimum distance between the eye and a viewing surface below which the surface is blurry. Such a test for amplitude of accommodation preferably is performed by having the user lean forward until the screen becomes fuzzy. While the user is at this distance where the screen has become fuzzy, the user clicks the mouse and the software measures the distance to the user via the distance sensor 16....," para. [0027]).

It would have been obvious to one ordinary skill in the relevant field at the time the invention was made to use distance determination through the *eye distance measurement* taught in *Fedorovskaya*, with the *Lee* because: *Fedorovskaya* identifies that a variety of methods can be used to determine distance between a user and a video camera and that eye distance measurement is one method known in the art to be a suitable equivalents for that purpose. According to *Fedorovskaya*, eye distance measurement is a known alternative, see above.

It would have further been obvious to one ordinary skill in the relevant field at the time the invention was made to use a saturation of a color for displaying at least one of the display items depending on the user position information. one skilled in the art, having common knowledge and common sense, would reasonably be expected to draw the inference from *Stern et al.* that a saturation of a color for displaying at least one

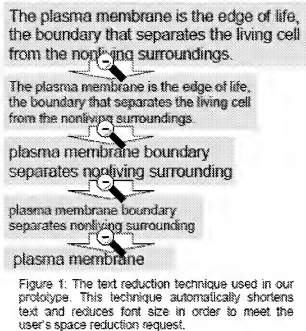
Art Unit: 2179

display item could depend on user position information to determine "...the optimal viewing distance." (para. [0023]).

10. **Claims 17, 24, and 26-27** are rejected under 35 U.S.C. 103(a) for being obvious over by *Lee* (U.S. Pre-Grant Pub. 2003/0234799 A1) in view of *Good, L., Bederson, B. B., Stefik, M., Baudisch, P.* (April, 2002). Automatic Text Reduction for Changing Size Constraints pp. 798-799 ("*Good*") and *Fedorovskaya* (US 2003/0156304 A1).

As to claims **17, 24, and 26-27**, *Lee* further disclosed (see claim 16 above) rephrasing through omission (i.e. "...According to the first embodiment of the present invention, the video card 7 can be controlled by a video card control program such as a text size adjusting function of a control board provided in the operating system....," para. [0033]): If a user is in a first position [closer distance] with respect to the display the information includes an amount of text that is larger than what it would be if the user was in a second position [farther distance] with respect to the display.

*Lee* differs in that re-phrasing is not clearly shown. *Good* teaches rephrasing on computer displays (p.1) when size constraints dynamically change p.1, see also fig. 1, reproduced below:



*Good* is cited for teaching rephrasing automatically upon change ("...the system automatically replaces the current representation with a shortened version of the text at the original font size.," *See* page 2).

It would have been obvious to one ordinary skill in the relevant field at the time the invention was made to use the rephrasing as taught by *Good*, as claimed, with the method and device of *Lee* because re-phrasing is recognized to be a solution that is advantageously suitable for the problem changing space requirements ("We believe that scalable text, in addition to increasing practical screen size, has the potential to assist users in abstraction. Using reduction techniques such as eliminating common words may help users to more easily identify patterns such as rare, recurring key words or related concept terms. " ; *Good*, Page 2).

*Lee* differs from claim 15 in that *capturing an image of a user; measuring an eye distance between a right eye and a left eye of the user in the image; generating user*

Art Unit: 2179

*position information of the user in relation to a display of said display device based on the eye distance, is not clearly shown.*

*Fedorovskaya* is cited for the teaching of capturing an image of a user ("...recording one or more of the following signals using physical or bio-metrical devices...", para. [0025]); measuring an eye distance between a right eye and a left eye of the user in the image ("...The distance between the person's eyes...", para. [0055]); generating user position information of the user in relation to a display of said display device based on the eye distance ("...depends on the distance of the user to the video camera...", para. [0055]), wherein said user position information is descriptive of a distance of the user with respect to said display ("...The distance between the person's eyes is used to account for this dependency...", para. [0055]).

It would have been obvious to one ordinary skill in the relevant field at the time the invention was made to use distance determination through the *eye distance measurement* taught in *Fedorovskaya*, with the *Lee* because: *Fedorovskaya* identifies that a variety of methods can be used to determine distance between a user and a video camera and that eye distance measurement is one method known in the art to be a suitable equivalents for that purpose. According to *Fedorovskaya*, eye distance measurement is a known alternative:

[t]he specified image divided by the distance between the person's eyes. The distance between the person's eyes is determined using the facial recognition algorithms mentioned above. The necessity of taking the ratio between the size of the mouth and some measure related to the head of the person (e.g. the distance between the eyes) stems from the fact that the size of the mouth extracted from the video frame depends on the distance of the user to the video camera, position of the head, etc. The distance between the person's eyes is used to account for this dependency,

however, other measures such as the height or width of the face, the area of the face and others measures can also be used...

(para. [0055]).

11. **Claims 18 and 23** rejected under 35 U.S.C. 103(a) as being unpatentable over *Lee* (U.S. Pre-Grant Pub. 2003/0234799 A1) in view of *Kuga* (U.S. Patent No. 5,686,940 A) and *Good, L., Bederson, B. B., Stefik, M., Baudisch, P.* (April, 2002). Automatic Text Reduction for Changing Size Constraints pp. 798-799 ("*Good*") and *Fedorovskaya* (US 2003/0156304 A1).

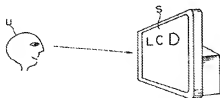
As to dependent **claim 18**, which depends from claim 15, *Lee* taught the limitations addressed in the treatment of claim 15, above. Specifically, a method for operating a display device ("provided on a display apparatus", Abstract), comprising: generating user position information of a user in relation to a display of said display device ("distance between the LCD 1 and the upper half of the user's body is detected," col. 3, Lines 24-30), wherein said user position information is descriptive of a distance of the user with respect to said display ("whether the upper half of the user's body is near the LCD 1 or far from the LCD 1 is detected." col. 3, Lines 24-30), changing a display mode for displaying information on said display depending on said user position information ("display of a moving image is made according to the detected distance." col. 1, Lines 59-63), wherein in said display mode an amount of said displayed information depends on said user position information and displaying said information on said display based on said display mode ("The changeover between the enlargement and the reduction of an image and between the scrolling and the stopping of a text and between the moving display and the stationary display of a moving image is made according to the detected

Art Unit: 2179

distance." col. 1, Lines 59-63). However, *Lee* fails to clearly disclose that the information includes a first amount of semantic content in a first position, or a second amount of semantic content in a second position.

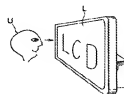
*Kuga* teaches that in a first position varying the amount of text based upon the distance from a LCD, ("...the upper half of the user's body is moved away from the LCD 1 to perform the high-speed scrolling, and when a desired part of the displayed image is approached, the upper half is slightly moved toward the LCD 1 to perform the low-speed scrolling. When the desired part is displayed, the upper half is further moved toward the LCD 1 to stop the scrolling,." col. 4, Lines 50-59) wherein said first position represents a closer position to said display than said second position and said first amount of semantic content is larger than said second amount of semantic content.

FIG. 2



For example, in Fig. 2 the distance between a user U and the LCD 1 is long, so that a reduced image S is displayed on the LCD 1 (col. 3, lines 37-45).

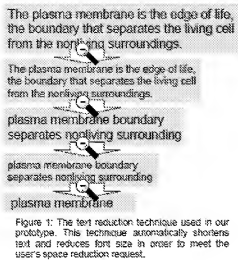
FIG. 3



For example, in Fig. 3 the distance between the user U and the LCD 1 is short, so that an enlarged image L is displayed on LCD 1 (col. 3, lines 37-45).

*Lee* and *Kuga* don't clearly show the information including a first amount of semantic content in a first position, or a second amount of semantic content in a second position. *Good* is cited for teaching changing the text amount (semantic content) on

computer displays (e.g. p.1) when size the constraints dynamically change, see also fig. 1, reproduced below:



*Good* automatically changes the semantic content upon the size changes ("...the system automatically replaces the current representation with a shortened version of the text at the original font size.," *Good*, Page 2).

It would have been obvious to one ordinary skill in the relevant field at the time the invention was made to have used the resizing method taught in *Good*, as claimed, with the method and device of *Lee* and *Kuga* because *Kuga* and *Lee* are further directed to the same problem of adjusting the size of an image automatically according to a change of a distance between a display apparatus and a user<sup>1</sup>. Also, the teachings in *Kuga* provide a motivation for using the method taught by *Lee* (i.e. the font size is continuously increased when increasing the distance between a user and a display and that the font size is continuously decreased when decreasing the distance between a user and a display).

<sup>1</sup> Thereby, the change of display is made by a very natural movement of the viewer that the upper half of the body is moved forward or backward." col. 1, line 65 -to- col. 2, line 3 *Kuga*.



Art Unit: 2179

Further, *Kuga* expressly suggests the that the manual process of changing displays is cumbersome and inefficient especially for handicapped people (including those with visual impairments):

The change of displays is usually made by the user by operating an input means[.] However, when the display modes are changed by such operations, delay is readily caused in the man to machine interface, and the operations themselves are complicated. In addition, the operations are sometimes very difficult for physically handicapped people. (*Kuga*, col. 1, Lines 31-46).

*Good* also is directed to and suggests assisting users, "We believe that scalable text, in addition to increasing practical screen size, has the potential to assist users in abstraction. Using reduction techniques such as eliminating common words may help users to more easily identify patterns such as rare, recurring key words or related concept terms." (*Good*, Page 2).

It should be noted, *Lee* differs from claim 15 in that capturing an image of a user; measuring an eye distance between a right eye and a left eye of the user in the image; generating user position information of the user in relation to a display of said display device based on the eye distance, is not clearly shown.

*Fedorovskaya* is cited for the teaching of capturing an image of a user ("...recording one or more of the following signals using physical or bio-metrical devices...", para. [0025]); measuring an eye distance between a right eye and a left eye of the user in the image ("...The distance between the person's eyes...", para. [0055]); generating user position information of the user in relation to a display of said display device based on the eye distance ("...depends on the distance of the user to the video camera...", para. [0055]), wherein said user position information is descriptive of a

Art Unit: 2179

distance of the user with respect to said display ("...The distance between the person's eyes is used to account for this dependency...", para. [0055]).

It would have been obvious to one ordinary skill in the relevant field at the time the invention was made to use distance determination through the eye distance measurement taught in *Fedorovskaya*, with the *Lee* because: *Fedorovskaya* identifies that a variety of methods can be used to determine distance between a user and a video camera and that eye distance measurement is one method known in the art to be a suitable equivalents for that purpose. According to *Fedorovskaya*, eye distance measurement is a known alternative:

[t]he specified image divided by the distance between the person's eyes. The distance between the person's eyes is determined using the facial recognition algorithms mentioned above. The necessity of taking the ratio between the size of the mouth and some measure related to the head of the person (e.g. the distance between the eyes) stems from the fact that the size of the mouth extracted from the video frame depends on the distance of the user to the video camera, position of the head, etc. The distance between the person's eyes is used to account for this dependency, however, other measures such as the height or width of the face, the area of the face and others measures can also be used...

(para. [0055]).

As to dependent **claim 23**, this claim differs from claim 18 only in that it is directed to a product defined by the process of claim 18. Accordingly, this claim is rejected for the same reasons set forth in the treatment of claim 18, above.

## RESPONSE TO ARGUMENTS

12. Applicant arguments, filed 7/2/2009, in response previous Office Action (Mail dated: 4/3/2009), have been fully considered in the following way:

13. Arguments concerning the Rejections of Claims 24 made in the previous Office Action (Mail dated: 4/3/2009) have been fully considered. In response, it is noted that Claim 24 was inadvertently omitted from the following group Claims 17, 24, and 26-27. Both claims depend from claim 15, however, Claim 26 contains all of the features claim 24, in addition to several important additional limitations, and should have been treated in that group.

#### **RESPONSE TO ARGUMENTS**

14. Applicant's arguments (see Remarks filed, 7/2/2009) emphasize:

In rejecting the claimed feature of "deriving a view angle of the user with respect to the display from said image of the user", the Office Action relies on the above noted portion of Stern that describes incorporating an LED "to determine the correct viewing angle for the individual". However, it unclear how using an LED to determine a correct viewing angle for an individual is the same as deriving a view angle of the user ... from said [captured] image of the user, as claimed. More particularly, an LED is not capable of capturing an image of a user, whatsoever, much less providing a captured image from which a view angle of user can be derived. Further, Stern fails to disclose how the LED is used to determine the correct viewing angle of the individual.

The Examiner respectfully points to the following disclosures in *Stern* :

[0042] While the system has been described throughout with the use of software, in an alternative embodiment, the system will be in communication with a central website. Such communication may be provided, for example, via the Internet. The website would thus control the system and various parameters may be automatically changed within the system as directed from the website, such as, for example, the viewer distance from the monitor.

[0043] The system also preferably includes a leveling device for proper positioning of the individual in front of the computer. LEDs may be incorporated into the system in order to determine the correct viewing angle for the individual.

[0044] Additionally, the system preferably includes a mechanical apparatus situated under a user's monitor or incorporated into a user's desk. The apparatus automatically moves the computer monitor (including flat panel displays) in a forward or backward direction to adjust for accommodative and visual changes of the user throughout the day. The image size or view size on the user's screen will also adjust automatically in accordance with the direction of monitor display movement. The mechanical apparatus also preferably will control the height of the monitor and the viewing angle of the monitor.

(emphasis added).

II. Applicant's arguments (see Remarks filed, 7/2/2009) further aver:

In rejecting the claimed feature directed to compensating for the view angle of the user, the Office Action relies on the mechanical apparatus used to control the viewing angle of the monitor described in Stem. Independent Claim 15, however, is amended to recite "changing a display mode for displaying display information on said display..., to compensate for the view angle of the user". Thus, independent Claim 15 is directed to

The Examiner respectfully points out that *Lee* was relied upon for teaching the above quoted feature. Specifically:

wherein in said display mode an amount of said displayed information depends on said user position information ("...displaying ratio data storage part 3 according to the distance between a user and the display apparatus ..., " para. [0029]); and displaying said information on said display based on said display mode ("...displaying ratio data, and an image displaying ratio setting ..., " para. [0029]; See also see S9 of Fig. 2).

III. Applicant's arguments (see Remarks filed, 7/2/2009) stress:

Therefore, *Lee*, even if combined with *Stem* and *Fedorovskaya* fails to teach or suggest a method for operating a display device that includes "capturing an image of a user ... deriving a view angle of the user with respect to the display from said image of the user [and] changing a display mode for displaying display information on said display ... to compensate for the view angle of the user...", as recited in independent Claim 15.

The Examiner respectfully points to the following, previously cited disclosure in

*Stern*:

Stern et al. taught deriving a view angle of the user with respect to the display from said image of ("order to determine the correct viewing angle for the individual," para. [0043]) and the view angle is compensated for ("The image size or view size on the user's screen will also adjust automatically in accordance with the direction of monitor display movement. The mechanical apparatus also preferably will control the height of the monitor and the viewing angle of the monitor," para. [0044]).

## CONCLUSION

15. All prior art made of record in this Office Action or as cited on form PTO-892 notwithstanding being relied upon, is considered pertinent to applicant's disclosure. Therefore, Applicant is required under 37 CFR §1.111(c) to consider these references fully when responding to this Office Action.

16. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 2179

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

17. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Samir Termanini at telephone number is (571) 270-1047. The Examiner can normally be reached from 9 A.M. to 6 P.M., Monday through Friday.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Weilun Lo can be reached on (571) 272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Samir Termanini/  
Examiner, Art Unit 2179

/Weilun Lo/  
Supervisory Patent Examiner, Art Unit 2179